ABSTRACT

Even when a temperature is lowered, a temperature of a fuel cell is raised, thereby improving the availability. In a fuel cell 1311, a combustion unit 1303 is provided in contact with a unit cell structure 101. In addition, a fuel tank 1309 is provided in contact with a fuel electrode 102 constituting the unit cell structure 101 and supplies a fuel 124 to the fuel electrode 102 directly. A part of the fuel 124 is supplied to the combustion unit 1303 from an combustion fuel discharging exit 1315 provided in the fuel tank 1309 via a combustion fuel supply pipe 1313.